Digital Module 21: Results Reporting for Large-scale Assessments

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Available in the ITEMS Portal at https://ncme.elevate.commpartners.com

Module Overview

In this digital ITEMS module, Dr. Francis O'Donnell and Dr. April Zenisky provide a firm grounding in the conceptual and operational considerations around results reporting for summative large-scale assessment. They anchor the module in the position that results reporting must be approached as a data-driven story that is purposefully designed to communicate specific information to accomplish specific goals. They further connect their overview to various aspects of validity and present different conceptual frameworks and practical models for report development. Throughout the module, they highlight research-grounded good practices, concluding with some principles and ideas around conducting reporting research. The module contains audio-narrated slides, an interview, interactive activities, and additional resources such as a glossary and reference documents.

Keywords: data, large-scale assessment, results, score reporting, validity, visualization

Prerequisite Knowledge

In order to maximally benefit from this module, learners should have…

- a working knowledge of foundational concepts in validity
- familiarity with the process of test development
- an understanding of the differences between norm-referenced and criterion-referenced testing
- familiarity with broad principles of test use and interpretation
- an appreciation of the role of measurement precision in the use and interpretation of results

Learning Objectives

Upon completion of this module, learners should be able to…

Conceptual Outcomes:

- articulate how results reporting connects to validity arguments for test score interpretation and use
- understand the broad principles and phases of report development
- think critically about the effectiveness of different kinds and presentations of information relative to the needs of specific stakeholder groups
- articulate the core ideas of three approaches for conceptualizing research on results reporting

Operational Outcomes:

- plan and carry out purposeful research and operational activities around reporting within the process of test development
- apply a working knowledge of empirical findings on report elements, layout, and appearance drawn from the psychometric literature to design results reports
- have a working understanding of how to apply established models for the development, evaluation, and maintenance of results reports

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Module Structure

The digital module is divided into the following sections, which can be reviewed sequentially or independently [*approximate completion times in parentheses*].

- Module Introduction [*5 Minutes*]
- Section 1: Conceptual Foundations *[20 minutes]*
- Section 2: The Who, What, and How of Results Reporting *[20 minutes*]
- Section 3: Report Development - Modeling the Process *[15 minutes]*
- Section 4: Best Practices and Guidelines for Reporting Results *[20 minutes]*
- Section 5: Conceptualizing Research on Results Reporting *[20 minutes]*

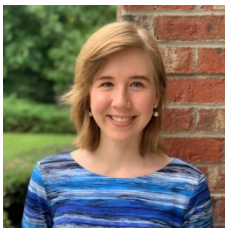
Module Components

This ITEMS module includes the following components, which are delivered within a web-delivered unified design shell that is compatible across platforms (i.e., laptops, desktops, tablets, and cell phones) and was created with modern course development software (*Articulate 360*):

- integrated content slides that provide a structured walk-through of the content with voice-over
- an interview with one of the developers of the Hambleton & Zenisky model to discuss the approach and its use in practice
- interactive activities
- glossary of key terms
- reference documents

Instructors

Francis O'Donnell, *National Board of Medical Examiners*



Francis O'Donnell is a psychometrician at the National Board of Medical Examiners. She earned her Ph.D. from the University of Massachusetts Amherst in Research, Educational Measurement, and Psychometrics in 2019. During her doctoral studies, she contributed to several projects on results reporting for K-12 and licensure assessments, which culminated in a dissertation about how teachers, parents, and students interpret achievement level labels. Francis's research has been presented at multiple conferences and a book chapter she wrote with Dr. Stephen Sireci about reporting in credentialing and admissions contexts appears in *Score Reporting: Research and Applications* (Zapata-Rivera, 2018). In her current role, she oversees psychometric activities for medical education and certification examinations and researches topics such as validity, fairness, and innovative approaches to reporting results.

April Zenisky, *University of Massachusetts Amherst*

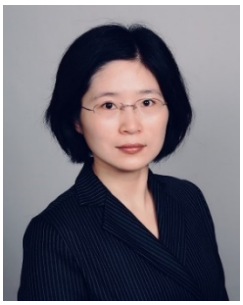
April L. Zenisky is Research Associate Professor in the Department of Educational Policy, Research, and Administration in the College of Education at the University of Massachusetts (UMass) Amherst, and Director of Computer-Based Testing Initiatives in UMass' Center for Educational Assessment (CEA). At UMass she leads and contributes to several externally-funded projects, and teaches courses and workshops on various topics, including test construction. April's main research interests include results reporting, technology-based item types, and computerized test designs. Her collaborative work on results reporting with Ronald K. Hambleton has advanced best practices for report development relative to both individual and group reporting and has explored emerging strategies for online reporting efforts. She has presented her research at various national and international conferences and has authored and co-authored a number of book chapters.

Instructional Design Team

André A. Rupp, *Mindful Measurement*

André is the co-author and co-editor of two award-winning interdisciplinary books entitled *Diagnostic Measurement: Theory, Methods, and Applications* (2010) and *The Handbook of Cognition and Assessment: Frameworks, Methodologies, and Applications* (2016) and has just published the *Handbook of Automated Scoring: Theory into Practice* (2020). His research synthesis- and framework-oriented work has appeared in a wide variety of prestigious peer-reviewed journals. Among other things, he is passionate about improving processes for interdisciplinary collaborations during the development and implementation of scoring solutions for digitally-delivered assessments. Consequently, he is very excited to serve as the associate editor / lead instructional designer of the ITEMS portal for NCME whose mission is to provide free digital resources to support self-directed learning and professional development.

Xi Lu, *Doctoral Candidate at Florida State University*



Xi is a doctoral candidate in the Instructional Systems and Learning Technologies program at Florida State University. Her current research interest focuses on designing and developing optimal learning supports to facilitate STEM learning in digital interactive environments. She also works as a research assistant with Dr. Val Shute on an NSF project targeted at designing various learning supports for a 2D physics game called *Physics Playground* to help middle school kids learn physics. Before coming to FSU, Xi taught Chinese for six years in Monterey Bay, California.
